



# TECHNICAL DATA SHEET

Product Name

**SCG HDPE**

Product Type

**PE100 Blue HDPE Compound**

Product Grade

**H1000PBL**

## Product Description

SCG HDPE H1000PBL is a blue (no lighter than RAL 5005), bimodal, high density polyethylene compound that is specially designed for water pressure pipes, especially for drinking water pipes. SCG HDPE H1000PBL is designed as PE100 pipes providing excellent in mechanical properties, and processability. Well dispersed UV stabilizer and anti-oxidant which also provide outstanding UV resistance and high thermal stability for long term using.

## Typical Application

- Drinking Water Pipes
- Stripe for PE100 pipe

## Product Characteristics

- Good process ability
- Good weathering resistance
- Outstanding mechanical strength

## Physical Properties

Property	Test Method	Typical Value	Unit
Melt Flow Rate	ISO 1133 @ 190 °C, 5.0 kg	0.28	g/10 min
Density (Compound)	ISO 1183	0.951	g/cm <sup>3</sup>
Tensile Strength at Yield	ISO 527 @ Crosshead speed 100 mm/min	23	MPa
Tensile Strength at Break	ISO 527 @ Crosshead speed 100 mm/min	> 30	MPa
Elongation at Break	ISO 527 @ Crosshead speed 100 mm/min	> 600	%
Oxidative induction time	ISO 11357-6 @ 210 °C	>20	min
Pigment Dispersion	ISO 18553	<3	-
Flexural Modulus	ASTM D 790	950	MPa
MRS Classification	ISO 12162:2009/ ISO 9080	10	MPa
Resistance to slow crack growth	ISO 13479 @ 80 °C	>500	Hrs

**Note:** Conversion factor for changing unit from kg/cm<sup>2</sup> to MPa is divided by 10.20

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### Processing

For extrusion of SCG HDPE H1000PBL, it is recommended to use a screw giving good melting and mixing without excessive shear. A single or double flight PE screws have proven satisfactory and will be used with good result. For normal extrusion equipment, we suggest a melt temperature of 200 – 220 °C, and drying 80 – 90 °C for 1 - 2 hours before use.

### Product Technical Assistance

For technical assistance or further information on this product or any other SCG Chemicals' products contact your SCG Chemicals technical service at the address or telephone number as specified below.

### Product Available Form

- Blue Pellet

### Product Packaging

- 25 kg loose bag
- 25 kg stretch wrap palletized
- 750 kg big bag
- Seabulk container

### Storage

- Store in original container in tidy according to the manual of Handling and Storage from Thai Polyethylene Company Limited/Thai Polypropylene Company Limited.
- Product(s) should be stored in dry and dust free location at temperature below 50 °C and protected from direct sunlight and/or heat, well-ventilated area, away from incompatible materials and food and drink, as this may lead to quality deterioration, which results in odor generation and color changes and can have negative effects on the physical properties of this product.
- Keep container tightly closed and sealed until ready for use. Containers that have been opened must be carefully resealed and kept upright to prevent leakage. Do not store in unlabeled containers. Use appropriate containment to avoid environmental contamination.
- The storage area should be stable and not be slopped.

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